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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/631,784

**Applicant(s)**

YAMADA, AKIHIRO

**Examiner**

ALLEN H. NGUYEN

**Art Unit**

2625

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/08/2008 has been entered. Currently, claims 1-14 are pending.

### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Response to Arguments***

3. Applicant's arguments filed 05/08/2008 have been fully considered but they are not persuasive.

4. With respect to applicant's argument that "Matsuyama and Lin, alone or in a permissible combination, does not disclose a settings image data providing portion controlling the communicating portion to provide the network with settings image data, the settings image data indicating a settings image that lists at least one setting item among a plurality of setting items, ...; an edit image data providing portion controlling the

communicating portion to provide the network with edit image data, the edit image data indicating an edit image that enables the user to identify at least one setting item desired to be listed in the settings image from among the plurality of setting items; and a settings image data editing portion receiving, from the network via the communicating portion, an edit instruction that is inputted in association with the edit image and that indicates at least one setting item identified by the user, as recited in amended independent claim 1, and as similarly recited in amended independent claim 7".

In response: Matsuyama '028 does not explicitly show an edit image data providing portion controlling the communicating portion to provide the network with edit image data, the edit image data indicating an edit image that enables the user to identify at least one setting item desired to be listed in the settings image from among the plurality of setting items;

a settings image data editing portion receiving, from the network via the communicating portion, an edit instruction that is inputted in association with the edit image and that indicates at least one setting item identified by the user.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Lin '673. In particular, Lin '673 teaches an edit image data providing portion controlling the communicating portion to provide the network with edit image data (i.e., validating the identification information, displaying the print job information at the computer, editing the print job information at the computer, updating the storage device with edited print job information, and transmitting to the printer the edited print job information; See Abstract), the edit image data indicating an edit image that enables

the user to identify at least one setting item desired to be listed in the settings image from among the plurality of setting items (i.e., the user may edit the print job from the user computer 25; Col. 5, lines 15-17, fig. 3);

a settings image data editing portion receiving (The user may also keep the original settings, i.e., chose not to edit the printing attributes, by selecting a "Cancel" push button 750, which is similar to the "Cancel" push button 640; Col. 7, lines 8-12, figs. 7-8), from the network via the communicating portion (Network L1, to which computers 20 are connected; Figs. 1-2), an edit instruction that is inputted in association with the edit image (i.e., the user may change any of these printing attributes by entering the new attribute in the appropriate window; Col. 7, lines 3-5, figs. 3, 8) and that indicates at least one setting item identified by the user (Figs. 3, 7-8).

The combination of Matsuyama '028 and Lin '673 does not explicitly show editing the settings image data based on the edit instruction to include the at least one setting item identified by the user in the settings image and to exclude at least one setting item not identified by the user from the settings image.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Iwata '718. In particular, Iwata '718 teaches editing the settings image data based on the edit instruction to include the at least one setting item identified by the user in the settings image (i.e., a settings display box fd17 displays desired data among the settings in the "Printer Group" field fd14 and the "Paper Settings" field fd16; Col. 32, lines 20-22, fig. 21) and to exclude at least one setting item not identified by the user from the settings image (i.e., excluded data settings fd17; Fig. 21).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuyama et al. (US 6,886,028) in view of Lin (US 7,145,673), and further in view of Iwata et al. (US 7,173,718).

Regarding claim 1, Matsuyama '028 discloses an image forming device (Printing Control apparatus, fig. 1) comprising:

a communicating portion (a communication unit 3004, fig. 4) connected to a network and capable of performing bi-directional communications (i.e., a communication unit 3004 exchanges data with the print controller 105, and with another print server and an image server, controls and evaluates data for the transmission of image data.

Therefore, it is noted that the network system wherein print servers and client computer are connected via the public network in a two-way communication; Col. 7, lines 1-4, and figs. 1, 4);

an image forming portion forming images based on image data (i.e., the individual print servers contain the printers to form the images on the print paper based on the print data received from the client computer via a communication unit 3004; Col.

4, lines 21-26), the image forming portion having a plurality of functions (i.e., the document editing application activates the browser 102 before the image editing process is begun, downloads, from the center server 105, a low-resolution image for editing that corresponds to a high-resolution image for printing, and edits the downloaded image; Col. 9, lines 20-25);

a settings image data providing portion controlling the communicating portion to provide the network with settings image data (i.e., the print setup information is HTML data generated for the external apparatus, and the external apparatus manages the print setup information for each output shop; Col. 2, lines 25-27, and figs. 17A-B), the settings image data indicating a settings image that lists at least one setting item among a plurality of setting items (i.e., a print detail information setup page for displaying the received preview image file and for setting print detail information; Col. 10, lines 15-20, fig. 8, STEP806), the plurality of setting items being used for performing settings related to the plurality of functions possessed by the image forming portion (i.e., the contents of the print server information (shop information) file; Fig. 7), respectively, the settings image enabling a user to perform settings related to at least one function corresponding to the listed at least one setting item (i.e., a print detail information setup area 903, wherein a print server name, a printing sheet size and the number of copies are designated; Col. 10, lines 36-40, figs. 9-10);

It is noted that Matsuyama '028 does not explicitly show an edit image data providing portion controlling the communicating portion to provide the network with edit image data, the edit image data indicating an edit image that enables the user to identify

at least one setting item desired to be listed in the settings image from among the plurality of setting items;

a settings image data editing portion receiving, from the network via the communicating portion, an edit instruction that is inputted in association with the edit image and that indicates at least one setting item identified by the user.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Lin '673. In particular, Lin '673 teaches an edit image data providing portion controlling the communicating portion to provide the network with edit image data (i.e., validating the identification information, displaying the print job information at the computer, editing the print job information at the computer, updating the storage device with edited print job information, and transmitting to the printer the edited print job information; See Abstract), the edit image data indicating an edit image that enables the user to identify at least one setting item desired to be listed in the settings image from among the plurality of setting items (i.e., the user may edit the print job from the user computer 25; Col. 5, lines 15-17, fig. 3);

a settings image data editing portion receiving (The user may also keep the original settings, i.e., chose not to edit the printing attributes, by selecting a "Cancel" push button 750, which is similar to the "Cancel" push button 640; Col. 7, lines 8-12, figs. 7-8), from the network via the communicating portion (Network L1, to which computers 20 are connected; Figs. 1-2), an edit instruction that is inputted in association with the edit image (i.e., the user may change any of these printing attributes by



entering the new attribute in the appropriate window; Col. 7, lines 3-5, figs. 3, 8) and that indicates at least one setting item identified by the user (Figs. 3, 7-8).

In view of the above, having the system of Matsuyama '028 and then given the well-established teaching of Lin '673, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Matsuyama '028 as taught by Lin '673 to include: an edit image data providing portion controlling the communicating portion to provide the network with edit image data, the edit image data indicating an edit image that enables the user to identify at least one setting item desired to be listed in the settings image from among the plurality of setting items; and a settings image data editing portion receiving, from the network via the communicating portion, an edit instruction that is inputted in association with the edit image and that indicates at least one setting item identified by the user, since Lin stated in col. 2, lines 35-40 that such a modification would enhance a flexibility in changing printing attributes from the user's computer leads to efficiencies and achievement of time and resources.

The combination of Matsuyama '028 and Lin '673 does not explicitly show editing the settings image data based on the edit instruction to include the at least one setting item identified by the user in the settings image and to exclude at least one setting item not identified by the user from the settings image.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Iwata '718. In particular, Iwata '718 teaches editing the settings image data based on the edit instruction to include the at least one setting item identified by the user in the settings image (i.e., a settings display box fd17 displays desired data

among the settings in the "Printer Group" field fd14 and the "Paper Settings" field fd16; Col. 32, lines 20-22, fig. 21) and to exclude at least one setting item not identified by the user from the settings image (i.e., excluded data settings fd17; Fig. 21).

In view of the above, having the combination system of Matsuyama '028 and Lin '673 and then given the well-established teaching of Iwata '718, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Matsuyama '028 and Lin '673 as taught by Iwata '718 to include: editing the settings image data based on the edit instruction to include the at least one setting item identified by the user in the settings image and to exclude at least one setting item not identified by the user from the settings image, since Iwata stated in col. 1, lines 65+ that such a modification would be accordingly demanded to adequately set various pieces of information, such as the paper-related information, and thereby ensure preferable resulting prints.

Regarding claim 13, Matsuyama '028 does not disclose an image forming device (Printing Control apparatus, fig. 1), wherein the edit image data is indicative of the edit image that enables a user to identify a setting item desired to be included in the settings image, and wherein the settings image data editing portion edits the settings image data based on the edit instruction by including only the user's identified setting item in the settings image and by excluding the user's non-identified setting item from the settings image.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Lin '673. In particular, Lin '673 teaches an image forming device (15, fig. 5), wherein the edit image data is indicative of the edit image that enables a user to identify a setting item desired to be included in the settings image (the graphical user interface 700/400, figs. 3, 8), and wherein the settings image data editing portion edits the settings image data based on the edit instruction by including only the user's identified setting item in the settings image (i.e., using the graphical user interface 700/400, the user may change any of these printing attributes by entering the new attribute in the appropriate window. The new attribute may be typed in the appropriate window, or may be selected by highlighting a selection of a drop-down menu; see col. 7, lines 2-7, figs. 3, 8) and by excluding the user's non-identified setting item from the settings image (The user may also keep the original settings, i.e., chose not to edit the printing attributes, by selecting a "Cancel" push button 750; col. 7, lines 9-12, fig. 8).

In view of the above, having the system of Matsuyama '028 and then given the well-established teaching of Lin '673, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Matsuyama '028 as taught by Lin '673 to include: an image forming device, wherein the edit image data is indicative of the edit image that enables a user to identify a setting item desired to be included in the settings image, and wherein the settings image data editing portion edits the settings image data based on the edit instruction by including only the user's identified setting item in the settings image and by excluding the user's non-identified setting item from the settings image, since Lin stated in col. 2, lines 35-40 that such a

modification would enhance a flexibility in changing printing attributes from the user's computer leads to efficiencies and achievement of time and resources.

Regarding claim 2, Matsuyama '028 does not disclose an image forming device (Printing Control apparatus, fig. 1), wherein the edit image data includes settings item inclusion-setting data indicative of a settings item inclusion-setting portion in the edit image used for setting whether or not to include, in the settings image, a setting item used for performing a setting for each of the plurality of functions,

wherein the settings image data editing portion receives the edit instruction is inputted in association with the settings item inclusion-setting portion in the edit image, and edits, based on the edit instruction, the settings image data to selectively include the setting item for each function in the settings image.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Lin '673. In particular, Lin '673 teaches an image forming device (15, fig. 5), wherein the edit image data includes settings item inclusion-setting data indicative of a settings item inclusion-setting portion in the edit image\_used for setting whether or not to include (Duplex, Collate, Staple, Punch with on/off Display, fig. 3), in the settings image, a setting item used for performing a setting for each of the plurality of functions (In FIG. 3, the "Set up" graphical user interface 400 permits the user to select a job type or mode, for example by selecting "Document Server" on a "Job Type" drop-down menu 410. The user may also set a variety of printing attributes, such as a print job orientation using an "Orientation" drop-down menu 420, or a paper size using a "Paper Size" drop-

down menu 430; see col. 2, lines 1-10),

wherein the settings image data editing portion receives the edit instruction is inputted in association with the settings item inclusion-setting portion in the edit image (i.e., the user may change any of these printing attributes by entering the new attribute in the appropriate window; col. 7, lines 3-5, figs. 3, 8), and edits, based on the edit instruction, the settings image data to selectively include the setting item for each function in the settings image (i.e., the new attribute may be typed in the appropriate window, or may be selected by highlighting a selection of a drop-down menu; col. 7, lines 5-10, fig. 8).

In view of the above, having the system of Matsuyama '028 and then given the well-established teaching of Lin '673, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Matsuyama '028 as taught by Lin '673 to include: an image forming device, wherein the edit image data includes settings item inclusion-setting data indicative of a settings item inclusion-setting portion in the edit image\_used for setting whether or not to include, in the settings image, a setting item used for performing a setting for each of the plurality of functions,

wherein the settings image data editing portion receives the edit instruction is inputted in association with the settings item inclusion-setting portion in the edit image, and edits, based on the edit instruction, the settings image data to selectively include the setting item for each function in the settings image, since Lin stated in col. 2, lines 35-40 that such a modification would enhance a flexibility in changing printing attributes from the user's computer leads to efficiencies and achievement of time and resources.

Regarding claim 3, Matsuyama '028 does not disclose an image forming device, wherein the edit image data includes layout setting data indicative of a layout setting portion in the edit image used for setting an arrangement how the setting item for each of the plurality of functions is to be selectively arranged in the settings image,

wherein the settings image data editing portion receives the edit instruction that is inputted in association with the layout setting, portion in the edit image, and edits, based on the edit instruction, determines an arrangement how the setting item for each function is to be selectively arranged in the settings image.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Lin '673. In particular, Lin '673 teaches an image forming device (15, fig. 5), wherein the edit image data includes layout setting data indicative of a layout setting portion in the edit image (Layout 720, figs. 3, 8) used for setting an arrangement how the setting item for each of the plurality of functions is to be selectively arranged in the settings image (In FIG. 3, the "Set up" graphical user interface 400 permits the user to select a job type or mode, for example by selecting "Document Server" on a "Job Type" drop-down menu 410. The user may also set a variety of printing attributes, such as a print job orientation using an "Orientation" drop-down menu 420, or a paper size using a "Paper Size" drop-down menu 430; see col. 2, lines 1-10),

wherein the settings image data editing portion receives the edit instruction that is inputted in association with the layout setting (i.e., the user may change any of these printing attributes by entering the new attribute in the appropriate window; col. 7, lines 3-5, figs. 3, 8), portion in the edit image, and edits, based on the edit instruction,

determines an arrangement how the setting item for each function is to be selectively arranged in the settings image (i.e., the new attribute may be typed in the appropriate window, or may be selected by highlighting a selection of a drop-down menu; Col. 7, lines 5-10, fig. 8).

In view of the above, having the system of Matsuyama '028 and then given the well-established teaching of Lin '673, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Matsuyama '028 as taught by Lin '673 to include: an image forming device, wherein the edit image data includes layout setting data indicative of a layout setting portion in the edit image used for setting an arrangement how the setting item for each of the plurality of functions is to be selectively arranged in the settings image, and wherein the settings image data editing portion receives the edit instruction that is inputted in association with the layout setting, portion in the edit image, and edits, based on the edit instruction, determines an arrangement how the setting item for each function is to be selectively arranged in the settings image, since Lin stated in col. 2, lines 35-40 that such a modification would enhance a flexibility in changing printing attributes from the user's computer leads to efficiencies and achievement of time and resources.

Regarding claim 4, Matsuyama '028 discloses an image forming device (Printing Control apparatus, fig. 1), wherein the settings image data providing portion includes:

a storage portion storing a plurality of sets of settings image data (i.e., a ROM 3003 is used to store operating procedures for the CPU 3001, which includes a program

ROM, for storing a system program for controlling devices in the print server and an image editing program for editing a printing image; see col. 6, lines 62-65, and fig. 4);

a selecting portion receiving (i.e., a hard disk drive (HDD) 3009 is used to store a program for processing a print request received from the print controller 105; see col. 7, lines 11-13, and fig. 4), from the network via the communicating portion (Communication Unit 3004, fig. 4), a selection instruction specifying one desired set of settings image data (i.e., a communication unit 3004 exchanges data with the print controller 1056, and with another print server and an image server; see col. 7, lines 1-3, and fig. 4), and selecting the desired set of settings image data from the storage portion (i.e., a communication unit 3004 exchanges, controls and evaluates data for the transmission of image data; see col. 7, line 3, and fig. 4).

Regarding claim 5, Matsuyama '028 discloses an image forming device (Printing Control apparatus, fig. 1), further comprising an identification data storing portion storing a plurality of sets of identification data in one to one correspondence with the plurality of sets of settings image data (i.e., the print controller 105 obtains an image for printing that is designated by the image ID contained in the printing order, and transmits the printing order and the printing image to the print server 108; Col. 5, lines 6-9),

wherein the edit image data providing portion includes a determining portion receiving a set of identification data (i.e., the printing order is a file including editing information for a script form and an image ID; see col. 9, lines 28-30), via the communicating portion from the network (i.e., the network peruser 102, which in the



client computer 101 is a browser, accesses the WWW server 109 in the print controller 105; Col. 4, lines 47-49), and referring to the identification data storing portion to determine whether the received identification data set matches an identification data set that corresponds to the desired set of settings image data specified by the selection instruction, the edit image data providing portion providing the edit image data to the network when the determining portion determines that the identification data sets match (i.e., the document editor 104 generates network printing data for a document that is being edited. Included in the printing data, in script form, is editing information, which is history information for editing an image, and the ID of an image that is employed; Col. 10, lines 1-5).

Regarding claim 6, Matsuyama '028 discloses an image forming device (Printing Control apparatus, fig. 1), further comprising:

a displaying portion sequentially displaying (a print detail information display area 902, col. 10, lines 32-33, and fig. 9), in a predetermined order (the printing order execution page, col. 12, line 52, and fig. 12), the plurality of setting items that can be included in the settings image data (i.e., the print detail information display area 902 are a print detail information setup area 903; see col. 10, lines 35-37, and fig. 9);

a setting portion setting whether to include, in the settings image, each setting item displayed by the displaying portion (i.e., a print detail information setup page for displaying the received preview image file and for setting print detail information; Col. 10, lines 15-17),

wherein the settings image data editing portion edits the settings image to include therein those setting items that have been set by the setting portion to be included in the settings image (i.e., the print server that is functioning as the output shop edits the printing image to obtain a desired printing form, and prints it in the form designated in the printing order; Col. 5, lines 24-27).

Regarding claim 7, Matsuyama '028 discloses a network system comprising:  
a network (Public Network, fig. 1);  
an image forming device (a printing control apparatus, fig. 1) including:  
a communicating portion connected to the network and capable of performing bi-directional communications (i.e., a communication unit 3004 exchanges data with the print controller 105, and with another print server and an image server, controls and evaluates data for the transmission of image data. Therefore, it is noted that the network system wherein print servers and client computer are connected via the public network in a two-way communication; Col. 7, lines 1-4, and figs. 1, 4);

a personal computer (101, fig. 1) including:  
a communicating device connected to the network and capable of performing bi-directional communications (i.e., a communication unit 1004 exchanges data with the print controller 105, with which communication may be conducted via a connection to the Internet provided by a dial-up connection to a public line, or via a LAN connection to a proxy server on a dedicated line. Therefore, it is noted that the network system wherein print servers and client computer are connected via the public network in a two-

way communication; Col. 5, lines 48-52, and figs. 1-2);

a display device displaying an image based on image data from the image forming device via the communicating device (i.e., display data generation means having a CGI function for employing the information held by the client computer and separately acquired HTML template data to generate HTML data that the network browsing means is capable of displaying; Col. 2, lines 43-47);

an instruction inputting portion enabling a user to input various instructions (i.e., a keyboard controller 1007 controls a signal entered at an external input device 1008, such as a keyboard; Col. 5, lines 56-57, and fig. 2);

a transmitting portion controlling the communicating device to transmit the instructions inputted via the instruction inputting portion to the image forming device via the network (i.e., a communication unit 1004 exchanges data with the print controller 105, with which communication may be conducted via a connection to the Internet provided by a dial-up connection to a public line, or via a LAN; Col. 5, lines 48-52, and fig. 2),

wherein the image forming device (a printing control apparatus, fig. 1) further includes:

an image forming portion forming images based on image data (i.e., the individual print servers contain the printers to form the images on the print paper based on the print data received from the client computer via a communication unit 3004; see col. 4, lines 21-26), the image forming portion having a plurality of functions (i.e., the document editing application activates the browser 102 before the image editing

process is begun, downloads, from the center server 105, a low-resolution image for editing that corresponds to a high-resolution image for printing, and edits the downloaded image; Col. 9, lines 20-25);

a settings image data providing portion controlling the communicating portion to provide via the network the personal computer with settings image data (i.e., the print setup information is HTML data generated for the external apparatus, and the external apparatus manages the print setup information for each output shop; Col. 2, lines 25-27, and figs. 17A-B), the settings image data indicating a settings image that lists at least one setting item among a plurality of setting items (i.e., a print detail information setup page for displaying the received preview image file and for setting print detail information; Col. 10, lines 15-20, fig. 8, STEP806), the plurality of setting items being used for performing settings related to the plurality of functions possessed by the image forming portion (i.e., the contents of the print server information (shop information) file; Fig. 7), respectively, the settings image enabling a user to perform settings related to at least one function corresponding to the listed at least one setting item (i.e., a print detail information setup area 903, wherein a print server name, a printing sheet size and the number of copies are designated; Col. 10, lines 36-40, figs. 9-10);

wherein the transmitting portion in the personal computer controls the communicating device to transmit to the image forming device a request to send the edit image data when the instruction inputting portion receives the user's request to edit the settings image (i.e., menu of a document editing application by using a pointing device, and the client computer 101 transmits to the WWW server 109 of the print controller

105, via the communication unit 1004, an HTML file acquisition request from the network peruser 103; Col. 7, lines 42-50), the edit image data providing portion in the image forming device controlling the communicating portion to transmit the edit image data to the personal computer upon receipt of the request (i.e., upon receiving an acquisition request for an HTML file from the network peruser 102 in the client computer 101, the WWW server 109 transmits the desired HTML file to the network peruser 102; Col. 4, lines 39-42), the display device in the personal computer displaying the edit image based on the edit image data (i.e., a video RAM (VRAM) 1005 develops an image displayed on the screen of a CRT 1006 representing the operating state of the system, and controls the display; Col. 5, lines 53-55, fig. 2),

wherein the transmitting portion in the personal computer controls the communicating device to transmit to the image forming device the edit instruction that the user inputs in the instruction inputting portion while viewing the edit image on the displaying device (i.e., the network peruser 102, which in the client computer 101 is a browser, accesses the WWW server 109 in the print controller 105 and acquires thumbnail images for image data (print image data) managed by the print controller 105, and provides them on a display for a user; Col. 4, lines 47-52, fig. 1).

Matsuyama '028 does not explicitly show an edit image data providing portion controlling the communicating portion to provide via personal computer with edit image data, the edit image data indicating an edit image that enables the user to identify at least one setting item desired to be listed in the settings image from among the plurality of setting items;

a settings image data editing portion receiving, from the personal computer via the network and the communicating portion, an edit instruction that the user inputs in the instruction inputting portion in association with the edit image and that indicates at least one setting item identified by the user.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Lin '673. In particular, Lin '673 teaches an edit image data providing portion controlling the communicating portion to provide via the network the personal computer with edit image data (i.e., validating the identification information, displaying the print job information at the computer, editing the print job information at the computer, updating the storage device with edited print job information, and transmitting to the printer the edited print job information; See Abstract), the edit image data indicating an edit image that enables the user to identify at least one setting item desired to be listed in the settings image from among the plurality of setting items (i.e., the user may edit the print job from the user computer 25; Col. 5, lines 15-17, fig. 3);

a settings image data editing portion receiving (The user may also keep the original settings, i.e., chose not to edit the printing attributes, by selecting a "Cancel" push button 750, which is similar to the "Cancel" push button 640; Col. 7, lines 8-12, figs. 7-8), from the personal computer via the network and the communicating portion (Network L1, to which computers 20 are connected; Figs. 1-2), an edit instruction that the user inputs in the instruction inputting portion in association with the edit image (i.e., the user may change any of these printing attributes by entering the new attribute in the

appropriate window; Col. 7, lines 3-5, figs. 3, 8) and that indicates at least one setting item identified by the user (Figs. 3, 7-8).

In view of the above, having the system of Matsuyama '028 and then given the well-established teaching of Lin '673, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Matsuyama '028 as taught by Lin '673 to include: an edit image data providing portion controlling the communicating portion to provide via personal computer with edit image data, the edit image data indicating an edit image that enables the user to identify at least one setting item desired to be listed in the settings image from among the plurality of setting items; and a settings image data editing portion receiving, from the personal computer via the network and the communicating portion, an edit instruction that the user inputs in the instruction inputting portion in association with the edit image and that indicates at least one setting item identified by the user, since Lin stated in col. 2, lines 35-40 that such a modification would enhance a flexibility in changing printing attributes from the user's computer leads to efficiencies and achievement of time and resources.

The combination of Matsuyama '028 and Lin '673 does not explicitly show editing the settings image data based on the edit instruction to include the at least one setting item identified by the user in the settings image and to exclude at least one setting item not identified by the user from the settings image.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Iwata '718. In particular, Iwata '718 teaches editing the settings image data based on the edit instruction to include the at least one setting item identified by

the user in the settings image (i.e., a settings display box fd17 displays desired data among the settings in the "Printer Group" field fd14 and the "Paper Settings" field fd16; Col. 32, lines 20-22, fig. 21) and to exclude at least one setting item not identified by the user from the settings image (i.e., excluded data settings fd17; Fig. 21).

In view of the above, having the combination system of Matsuyama '028 and Lin '673 and then given the well-established teaching of Iwata '718, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Matsuyama '028 and Lin '673 as taught by Iwata '718 to include: editing the settings image data based on the edit instruction to include the at least one setting item identified by the user in the settings image and to exclude at least one setting item not identified by the user from the settings image, since Iwata stated in col. 1, lines 65+ that such a modification would be accordingly demanded to adequately set various pieces of information, such as the paper-related information, and thereby ensure preferable resulting prints.

Regarding claim 14, Matsuyama '028 does not disclose a network system, wherein the edit image data is indicative of the edit image that enables the user to identify a setting item desired to be included in the settings image, and wherein the settings image data editing portion edits the settings image data based on the edit instruction by including only the user's identified setting item in the settings image and by excluding the user's non-identified setting item from the settings image.



However, the above-mentioned claimed limitations are well known in the art as evidenced by Lin '673. In particular, Lin '673 teaches a network system (figs. 1-2), wherein the edit image data is indicative of the edit image that enables the user to identify a setting item desired to be included in the settings image (the graphical user interface 700/400, figs. 3, 8), and wherein the settings image data editing portion edits the settings image data based on the edit instruction by including only the user's identified setting item in the settings image (i.e., using the graphical user interface 700/400, the user may change any of these printing attributes by entering the new attribute in the appropriate window. The new attribute may be typed in the appropriate window, or may be selected by highlighting a selection of a drop-down menu; see col. 7, lines 2-7, figs. 3, 8) and by excluding the user's non-identified setting item from the settings image (The user may also keep the original settings, i.e., chose not to edit the printing attributes, by selecting a "Cancel" push button 750; col. 7, lines 9-12, fig. 8).

In view of the above, having the system of Matsuyama '028 and then given the well-established teaching of Lin '673, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Matsuyama '028 as taught by Lin '673 to include: a network system, wherein the edit image data is indicative of the edit image that enables the user to identify a setting item desired to be included in the settings image, and wherein the settings image data editing portion edits the settings image data based on the edit instruction by including only the user's identified setting item in the settings image and by excluding the user's non-identified setting item from the settings image, since Lin stated in col. 2, lines 35-40 that such a

modification would enhance a flexibility in changing printing attributes from the user's computer leads to efficiencies and achievement of time and resources.

Regarding claim 8, Matsuyama '028 discloses a network system (fig. 1), wherein the edit image data includes settings item inclusion-setting data (a diagram showing a print detail information setup page, fig. 9), the display device in the personal computer displaying the edit image including a setting-item inclusion-setting portion based on the settings item inclusion-setting data (i.e., a preview image generated by the document editor 104 is displayed by the network peruser 102 in a preview image display area 901; see col. 10, lines 30-32), the instruction inputting portion receiving the user's setting-item inclusion setting instruction indicating his/her desire whether or not to include (i.e., a print detail information setup area 903, wherein a print server name, a printing sheet size and the number of copies are designated, and a decision button 904, for starting the generation of a printing order; see col. 10, lines 36-40), in the settings image (Set Print Detail, fig. 9), a setting item used for performing a setting for each of the plurality of functions (i.e., the printing order request function expander is the function expander 103, for the network peruser 102, that displays an execute button in the fee display page, and that executes a corresponding function in response to the depression of the button; see col. 11, lines 13-16, and fig. 11),

wherein the settings image data editing portion receives the setting-item inclusion setting instruction (i.e., set print details included in the print detail information display area 902 are a print detail information setup area 903; see col. 10, lines 35-37 and fig.

9), and edits (Document Editor 104 to edit, fig. 1), based on the setting-item inclusion setting instruction (a print detail information setup page, col. 10, line 29), the settings image data to selectively include the setting item for each function in the settings image (i.e., the print server name in the pop-up list 905 is selected, the printing order generation function expander reads a print server information file, a shop information file; see col. 10, lines 45-47).

Regarding claim 9, Matsuyama '028 discloses a network system (fig. 1), wherein the edit image data includes layout setting data (i.e., a document file that is created by the document editor 104; see col. 5, lines 63-64), the display device in the personal computer displaying the edit image including a layout setting portion based on the layout setting data (a Set Print Detail, fig. 9), the instruction inputting portion receiving the user's layout setting instruction indicating his/her desired arrangement how the setting item for each of the plurality of functions is to be selectively arranged in the settings image (i.e., a pop-up list is used to selectively arrange the plurality of functions included in a list of file names of print server information files from the print controller 105; see col. 10, lines 40-45),

wherein the settings image data editing portion receives the layout setting instruction (i.e., a document editor 104, which is operated by the client computer 101, has as one function the creation or the editing of a document; see col. 4, lines 3-5), and edits (Document Editor 104, fig. 1), based on the layout setting instruction (a print detail information setup area 903, col. 10, lines 36-37), determines an arrangement how the

setting item for each function is to be selectively arranged in the settings image (i.e., a pop-up list is used to selectively arrange the plurality of functions included in a list of file names of print server information files from the print controller 105; see col. 10, lines 40-45).

Regarding claim 10, Matsuyama '028 discloses a network (fig. 1), wherein the instruction inputting portion enables the user to input (i.e., the user has depressed the execute button 1102 using the external input device 1008; see col. 11, lines 28-29, fig. 11), into the layout setting portion (a fee display fee, col. 11, line 18, fig. 11), his/her desired setting items in an order desired to be arranged in the settings image (i.e., the setting items which are displayed by the printing order request function expander; see col. 11, lines 21-22).

Regarding claim 11, Matsuyama '028 discloses a network (fig. 1), wherein the instruction inputting portion enables the user to input (i.e., the user has depressed the execute button 1102 using the external input device 1008; see col. 11, lines 28-29, fig. 11), into the layout setting portion (a fee display fee, col. 11, line 18, fig. 11), arrangement data indicative of his/her desired arrangement (i.e., the printing order request function expander (a plug-in) 103 writes additional fee information in the printing order file; see col. 11, lines 29-30), in which his/her desired setting item is to be arranged in the settings image (and sets up the session, col. 11, line 33).

Regarding claim 12, Matsuyama '028 discloses a network system, wherein a plurality of sets of identification data being assigned to the plurality of personal computers (i.e., the print controller 105 obtains an image for printing that is designated by the image ID contained in the printing order, and transmits the printing order and the printing image to the print server 108; see col. 5, lines 5-9)

wherein the settings image data providing portion in the image forming device includes:

a storage portion storing a plurality of sets of settings image data in one to one correspondence with the plurality of computers (i.e., the information processing apparatus further comprises storage means for storing the print setup information, and examines the print setup information stored in the storage means to determine the print setup information; see col. 2, lines 4-7);

a selecting portion receiving (i.e., a hard disk drive (HDD) 3009 is used to store a program for processing a print request received from the print controller 105; see col. 7, lines 11-13, and fig. 4), from one personal computer via the network (i.e., a network peruser 102 functions as a browser operated by the client computer 101; see col. 3, lines 40-41), a selection instruction specifying one desired set of settings image data (i.e., the network peruser 102 interprets a file composed using HTML that is obtained via the Internet and a network from a WWW (World Wide Web) server 109 in the print controller 105; see col. 3, lines 41-45), and selecting the desired set of settings image data from the storage portion (it displays the results on the client computer 101, col. 3, line 47),

wherein the image forming device (Printing Control apparatus, fig. 1) further includes an identification data storing portion storing a plurality of sets of identification data in one to one correspondence with the plurality of sets of settings image data (i.e., the print controller 105 obtains an image for printing that is designated by the image ID contained in the printing order, and transmits the printing order and the printing image to the print server 108; see col. 5, lines 6-9),

wherein the edit image data providing portion includes a determining portion receiving a set of identification data (i.e., it generates editing information concerning locations whereat individual images having image IDs are to be pasted; see col. 4, lines 56-58), from the personal computer via the network (i.e., the network peruser 102, which in the client computer 101 is a browser, accesses the WWW server 109 in the print controller 105; see col. 4, lines 47-49), and referring to the identification data storing portion to determine whether the received identification data set matches an identification data set that corresponds to the desired set of settings image data specified by the selection instruction (i.e., based on the editing information, the document editor 104 activates the network peruser 102 to prepare a printing order; see col. 4, lines 60-61), the edit image data providing portion providing the edit image data to the personal computer when the determining portion determines that the identification data sets match (i.e., the print controller 105 obtains an image for printing that is designated by the image ID contained in the printing order, and transmits the printing order and the printing image to the print server 108; see col. 5, lines 5-9 ).

It is noted that Matsuyama '028 does not explicitly show a network system, wherein the personal computer includes a plurality of personal computers.

However, the above-mentioned claimed limitation is well known in the art as evidenced by Arakawa '076. In particular, Lin '673 teaches the use of a network system (fig. 1), wherein the personal computer includes a plurality of personal computers (computers 20, fig. 1).

In view of the above, having the system of Matsuyama '028 and then given the well-established teaching of Lin '673, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Matsuyama '028 as taught by Lin '673 to include: a network system, wherein the personal computer includes a plurality of personal computers, since Lin stated in col. 1, lines 20-25 that such a modification would ensure in larger offices, printers are often connected to a network, to which other printers and a number of computers may be connected.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Beard et al. (US 6,498,611) discloses system and method for providing a virtual operator panel for a peripheral device.

Shanahan et al. (US 6,732,090) discloses meta-document management system with user definable personalities.

Jerger et al. (US 6,473,800) discloses declarative permission requests in a computer system.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALLEN H. NGUYEN whose telephone number is (571)270-1229. The examiner can normally be reached on M-F from 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571)-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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